

IN THE CLAIMS:

Kindly amend claims 7, 12 and 22 as shown in the following listing of claims, which replaces all previous listings and versions of claims.

1. - 6. (canceled).

7. (currently amended) A charged particle beam processing method comprising the steps of:

dividing a pattern to be processed by a charged particle beam into a plurality of microscopic regions each having a size set such that when slightly smaller than a diameter of the charged particle beam irradiates a respective microscopic region it also irradiates portions of adjacent microscopic regions;

scanning the charged particle beam across the pattern; and

varying a frequency of the scanning so that each of the respective microscopic regions has an equal dose of irradiation applied thereto by the charged particle beam.

8. (previously presented) A charged particle beam processing method according to claim 7; wherein the step of varying a frequency of the scanning is performed so that microscopic regions at boundary portions of the pattern are

irradiated by the charged particle beam for a longer period of time than microscopic regions at interior portions of the pattern.

9. (previously presented) A charged particle beam processing method according to claim 7; wherein the pattern comprises a plurality of individual patterns within a scanning region of the charged particle beam; and the steps of scanning the charged particle beam and varying a frequency of the scanning are performed simultaneously on each of the individual patterns.

10. (previously presented) A charged particle beam processing method according to claim 7; further comprising the step of injecting a deposition gas while scanning the charged particle beam across the pattern to deposit a material on the pattern.

11. (previously presented) A charged particle beam processing method according to claim 7; wherein the charged particle beam is a focused ion beam.

12. (currently amended) A charged particle beam processing method comprising the steps of:

dividing a pattern to be processed by a charged particle beam into a plurality of microscopic regions each

having a size set such that when slightly smaller than a diameter of the charged particle beam irradiates a respective microscopic region it also irradiates portions of adjacent microscopic regions;

determining irradiation amount distribution information for each respective microscopic region necessary to obtain the same irradiation amount for each microscopic region; and

scanning the charged particle beam across the pattern based on the irradiation amount distribution information.

13. (previously presented) A charged particle beam processing method according to claim 12; wherein the step of determining irradiation amount distribution information for each respective microscopic region comprises the step of determining an irradiation amount for each microscopic region based upon a relative location thereof in the pattern.

14. (previously presented) A charged particle beam processing method according to claim 13; wherein the step of determining an irradiation amount for each respective microscopic region comprises the step of determining a number of microscopic regions directly adjacent thereto within the pattern.

15. (previously presented) A charged particle beam processing method according to claim 13; further comprising the step of varying a frequency of the scanning so that microscopic regions at boundary portions of the pattern are irradiated by the charged particle beam for a longer period of time than microscopic regions at interior portions of the pattern.

16. (previously presented) A charged particle beam processing method according to claim 15; wherein the step of varying a frequency of the scanning comprises the step of irradiating microscopic regions having a smaller number of directly adjacent microscopic regions for a longer period of time than those which have a larger number of directly adjacent microscopic regions.

17. (previously presented) A charged particle beam processing method according to claim 15; further comprising the step of storing a plurality of different microscopic region models each containing a charged particle beam irradiation amount and a different number of directly adjacent microscopic regions within a pattern.

18. (previously presented) A charged particle beam processing method according to claim 15; wherein the step of determining an irradiation amount for each respective microscopic region comprises the step of comparing each microscopic region to the stored models.

19. (previously presented) A charged particle beam processing method according to claim 12; wherein the pattern comprises a plurality of individual patterns within a scanning region of the charged particle beam; and the step of scanning the charged particle beam is performed simultaneously on each of the individual patterns.

20. (previously presented) A charged particle beam processing method according to claim 12; further comprising the step of injecting a deposition assist gas while scanning the charged particle beam across the pattern to deposit a material on the pattern.

21. (previously presented) A charged particle beam processing method according to claim 12; wherein the charged particle beam is a focused ion beam.

22. (currently amended) A charged particle beam processing method comprising the steps of:

dividing at least one pattern to be processed in a scanning region of a charged particle beam into a plurality of microscopic regions each having a size set such that when
slightly smaller than a diameter of the charged particle beam
irradiates a respective microscopic region it also irradiates
portions of adjacent microscopic regions;

storing irradiation amount distribution information for the microscopic regions corresponding to relative positions of the microscopic regions within the at least one pattern;

comparing the respective microscopic regions to the stored information; and

scanning the at least one pattern with the charged particle beam based on results of the comparisons.

23. (previously presented) A charged particle beam processing method according to claim 22; wherein the step of comparing the respective microscopic regions to the stored information is performed while displaying the microscopic regions on a display screen.

24. (previously presented) A charged particle beam processing method according to claim 22; wherein the step of storing irradiation amount distribution information for each respective microscopic region comprises the step of storing an irradiation amount for plural different types of microscopic regions each having a different number of directly adjacent microscopic regions within the at least one pattern.

25. (previously presented) A charged particle beam processing method according to claim 22; further comprising the step of varying a frequency of the scanning so that

microscopic regions at boundary portions of the at least one pattern are irradiated by the charged particle beam for a longer period of time than microscopic regions at interior portions of the at least one pattern.

26. (previously presented) A charged particle beam processing method according to claim 25; wherein the step of scanning the at least one pattern comprises the step of irradiating microscopic regions having a smaller number of directly adjacent microscopic regions for a longer period of time than those which have a larger number of directly adjacent microscopic regions.